



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,571	05/16/2005	Takuhiro Kondo	Got 202NP	5502
23995	7590	09/19/2007	EXAMINER	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			NGUYEN, VU Q	
		ART UNIT	PAPER NUMBER	
		3683		
		MAIL DATE	DELIVERY MODE	
		09/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/516,571	KONDO ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Vu Q. Nguyen	3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 June 2007.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,4,6 and 8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,4,6 and 8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 13 June 2007 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Amendment***

1. Applicant's submittal of an amendment on 06/13/2007 was entered, wherein:
  - Claims 1, 4, 6, and 8 pending and
  - Claims 1, 4, and 6 have been amended and
  - Claims 2, 3, 5, and 7 have been cancelled.

***Claim Objections***

2. Claims 1, 4, 6, and 8 are objected to because of the following informalities:

In claim 1, "the under surface", "the maximum descent position", "the top surface", and "the maximum ascent position" should be --an under surface--, --a maximum descent position--, --a top surface--, and --a maximum ascent position-- respectively, to avoid lack of antecedent basis issues.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1, 4, 6, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "a first cushion member is installed at a lower end of the screw shaft which comes into contact with the ball nut". It is unclear what comes into contact with the ball nut -- the first cushion member or the lower end of the screw shaft?

Claim 1 recites the limitation "a second cushion member is installed at a lower end of the bearing which comes into contact with the ball nut". It is unclear what comes into contact with the ball nut -- the second cushion member or the lower end of the bearing?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Document JP 9-327149 (JP '149).

Regarding claim 1, JP '149 discloses an electromagnetic shock absorber comprising: a shock absorber body (6, 12) which makes telescopic motion in response to an input from outside; a ball screw mechanism (10, 11) which is arranged at the shock absorber body, converts the telescopic motion into rotary motion, and is composed of a ball nut (11) and a screw shaft (10); a motor (1) which is provided coaxially with the shock absorber body and generates electromagnetic resistance to

Art Unit: 3683

oppose against the rotary motion to be input into a rotary shaft (1a) of the motor; and a cylindrical member (6, 18) which covers the shock absorber body and the motor from outside and whose part to cover the motor also serves as a motor frame; wherein: the shock absorber body has an external cylinder (6) and an internal cylinder (12) to be slidably inserted into the external cylinder; an upper part (18) of the external cylinder extends (see arguments below) so as to cover the motor, and the frame of the motor is formed at an extended part (18) of the external cylinder; the cylindrical member is constituted by (interpreted as "a part of"; see arguments below) the external cylinder; the ball nut of the ball screw mechanism is fixed to an upper part of the internal cylinder (by means of element 13) and a screw shaft to be spirally engaged with the ball nut is connected with the rotary shaft of the motor; an outer circumference of the internal cylinder is slidably supported by a bush (14) installed at an inner circumference of a lower end of the external cylinder; a halfway point of the screw shaft is rotatably supported through bearings (15) installed inside the external cylinder; a first cushion member (21) is installed at a lower end of the screw shaft which comes into contact with the ball nut from an under surface when the internal cylinder makes a stroke up to a maximum descent position; and a second cushion member (20) is installed at a lower end of the bearing which comes into contact with the ball nut from a top surface when the internal cylinder makes a stroke up to a maximum ascent position.

Regarding claim 6, see planetary gear mechanism 50.

Regarding claim 8, see elements 18 and 6 having a same diameter.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Document JP 9-327149 (JP '149) in view of U.S. Patent No. 5070284 (Patil et al.).

JP '149 discloses an electromagnetic shock absorber as applied to claims 1, 6, and 8 above.

JP '149 does not disclose expressly that the rotary shaft of the motor is rotatably supported at its both ends by a pair of bearings installed at the external cylinder.

Patil et al. disclose an electromagnetic shock absorber (100), wherein a rotary shaft (carried by upper end of screw shaft 112; column 5, lines 11-24) of a motor (104) is rotatably supported at its both ends by a pair of bearings (114).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the electromagnetic shock absorber as taught by JP '149 to include bearings at both ends of the rotary shaft of the motor as taught by Patil et al. The suggestion/motivation for doing so would have been to provide support and guidance, as is well-known in the art, for the rotary shaft of the motor.

***Response to Arguments***

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

10. However, some of Applicant's arguments may still be pertinent to the new ground(s) of rejection. On page 7, Applicant argues that when the claim recites that "the external cylinder extends so as to cover the motor," it does not mean that a new cylinder is attached. Applicant further argues that an extended cylinder is a cylinder that is longer. The Examiner respectfully disagrees. It appears that Applicant is arguing that the external cylinder and the extended part of the external cylinder (which covers the motor and serves as a motor frame) must be integral. However, this feature upon which Applicant relies is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, upon making the broadest reasonable interpretation, the Examiner respectfully submits that the recitation of "the external cylinder extends so as to cover the motor" does not preclude a multi-piece structure, and as long as the separate piece(s) is/are connected with the external cylinder to cover the motor, the limitation of the external cylinder "extending" has been met.

Claim 1 also recites the limitation "the cylindrical member is constituted by the external cylinder". Similarly, upon making the broadest reasonable interpretation, the Examiner respectfully submits that this limitation does not preclude a multi-piece structure either. The Examiner has interpreted the limitation to mean that the external

cylinder is a part of the cylindrical member (which covers the shock absorber body and the motor). The limitation does not recite whether or not the external cylinder is an integral part of the cylindrical member or a separate part of the cylindrical member, and thus, as long as the external cylinder is part of a cylindrical structure that covers the shock absorber body and the motor, the limitation has been met.

Therefore, in view of the above arguments, the Examiner respectfully submits that JP '149 discloses all the features of at least claim 1, as set forth in the rejection above.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 3559027.
12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3683

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

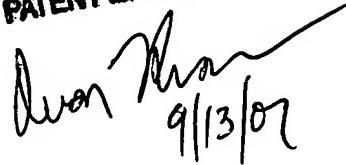
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Q. Nguyen whose telephone number is (571) 272-7921. The examiner can normally be reached on Monday through Friday, 11:30 AM to 8:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VQN

DEVON C. KRAMER  
PATENT EXAMINER

  
9/13/07